

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the applications:

I claim:

1. (Original) An improved electromagnetic work coil for removing dents from a conductive work piece, comprising:

a. a coil with insulated conductor windings passing through a clamped stressing region;

b. at least one clamp member located on said stressing region, said clamp member including two clamp surfaces and a part in tension outside of the stressing region to tangentially compress the windings in the stressing region, and;

c. said conductor windings forming symmetric paths to form a symmetrically aligned magnetic poles, said conductive windings being tapered to increase in height and width outside of the stressing region to improve thermal and electrical conductivity and decrease the magnetic field outside of the stressing region]

2. (Cancelled)

3. (Cancelled)

4. (Cancelled)

5. (Cancelled)

1 6. (Cancelled)

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3 7. (Cancelled)

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5 8. (Cancelled) An improved electromagnetic work coil for removing dents from a conductive
6 work piece, comprising a coil with insulated conductor windings passing through a stressing
7 region, said conductor windings in said stressing region being are constrained by at least one
8 clamp member with two clamp surfaces disposed on opposing sides of said stressing region.

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10 9. (Cancelled) An improved electromagnetic work coil for removing dents from a conductive
11 work piece, comprising a coil with insulated conductor windings passing through a stressing
12 region, said conductor windings having symmetric return paths to form a symmetrical
13 balanced magnetic field around said stressing region.

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15 10. (Cancelled) An improved electromagnetic work coil for removing dents from a
16 conductive work piece, comprising a coil with insulated conductor windings passing through
17 a stressing region, said conductor windings being tapered in thickness with said conductor
18 windings being thicker in one or more return path regions than said conductor windings
19 located in said stressing region.

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21 11. (Cancelled) An improved electromagnetic work coil for removing dents from a
22 conductive work piece, comprising a coil with insulated conductor windings passing through
23 a stressing region, said conductor windings being variably spaced with said conductor

1 windings spaced further apart in one or more return path regions than said conductor
2 windings located in said stressing region.

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4 12. (Cancelled) An improved electromagnetic work coil for removing dents from a
5 conductive work piece, comprising a coil with insulated conductor windings passing through
6 a stressing region, said conductor windings being strengthened behind said stressing region
7 with a bonded secondary winding material having greater electrical resistance.

8
9 13. (New) An improved electromagnetic work coil for electromagnetic dent removal with
10 a power supply that slowly energizes and more rapidly de-energizes said work coil to
11 inductively impart a pulling force on an adjacent conductive work piece, said work coil
12 comprising a coil with windings that include a conductor surrounded by insulation, said
13 windings passing through at least one stressing region and at least one return path region, the
14 portion of said windings passing through said return path region being wider than the portion
15 of said windings passing through said stressing region thereby improving the efficiency of the
16 inductance of said work coil and improving thermal transfer of heat away from said stressing
17 region.

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19 14. (New) The work coil as recited in claim 13, wherein said windings in said stressing
20 region are constrained by at least one clamp member, the clamp member including two clamp
21 surfaces on opposing sides of said stressing region.

22
23 15. (New) The work coil as recited in claim 13, wherein said windings are divided into

1 two return path regions so the combined widths of the portions of said windings in said return
2 path regions are greater than the width of the portion of said conductor windings that pass
3 through said stressing region.

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5 16. (New) The work coil as recited in claim 15, wherein said windings are equally
6 divided into said return path regions to form a symmetrically balanced magnetic field around
7 said windings passing through said stressing region.

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9 17. (New) The work coil as recited in claim 13, wherein said conductor in the portion of
10 said windings passing through said return path region is thicker than said conductor in the
11 portion of said windings passing through said stressing region.

12
13 18. (New) The work coil as recited in claim 13, wherein said insulator in the portion of
14 said windings passing through said return path region is thicker than said insulator in the
15 portion of said windings passing through said stressing region.

16
17 19. (New) The work coil as recited in claim 13, wherein said conductor in the portion of
18 said windings passing through said stressing region are strengthened behind with a bonded
19 secondary conductor having greater electrical resistance.